



### When do cows eat the most grass?

This year has certainly not been a typical year as far as grass growth is concerned. However for those farms with cows at grass, it is worth thinking about how cows eat to maximise the use of available grazing.

- Studies have shown that cows graze for between 7 - 13 hours a day, with the majority of this occurring during the hours of daylight.
- Conversely most of the rumination activity occurs at night when cows are lying down.
- **Most of the grazing activity is focused on the early morning and evening periods (sunrise and sunset).**
- The evening period prior to sunset is the period of highest grazing activity and feed intake. Pasture quality is also highest during this time with higher Dry Matter and carbohydrate content, as the grass is exposed to sunlight through the day.
- This can be used to our advantage by **having cows out at grass during the evening period**, when grass intakes will be highest, and grazing quality will be maximum.
- **Buffer feeding in the middle of the day** (before afternoon milking) takes advantage of the time when grazing periods are quieter.

With the recent hot dry weather, many are struggling to keep enough grass in front of the cows, and are having to buffer feed to ensure intakes of sufficient forage. With winter forage stocks likely to be tight, **buffer feeding should be prioritised to those cows that need it most** – fresh calvers and high yielders.

- Fresh calvers and high yielders must have their nutritional requirements met if future milk production, cow health and fertility are not to be compromised.
- **Consider fully housing fresh calvers/high yielders with mixed ration.** If this is not possible, then consider housing at night.
- **Cows that are over 60 days in calf, in mid/late lactation, and in BCS 3 or over**, can be restricted to below their requirements (for example on poorer quality grazing). However it is important to keep a close eye on their body condition, to ensure that they do not get too thin (BCS 2.0 or below) at dry off.
- Automatic parlour shedding gates can be useful. All cows get out to grass as one group during the day. After afternoon milking, the highs are shed off and kept inside at night, whilst the lows go out to clean up paddocks.
- **Keep a close eye on forage stocks**, and budget for both the rest of the summer and the coming winter. Bale silage or purchasing standing arable crops to make wholecrop are options worth considering if possible.
- **Blood test** the cows to “ask them what they think of the diet” before it is too late

### Heat stress in dairy cows

For those struggling in the hot weather, see previous article on heat stress from Aug 2009 <https://www.ed.ac.uk/vet/services/farm-animal-services/dairy/newsletters/newsletters-older>



## Sleeping parasites

Whilst we are all desperate for rain so that stock have something to eat, it would be worth considering what effect the unusually dry summer is having on pasture worm burdens.

During dry conditions, worm eggs and larvae remain dormant in cowpats. This means that the pasture worm burden is effectively low. Those of you undertaking monthly worm egg counts on youngstock will probably notice that worm egg counts have been noticeably lower this year. As there is no rain to help break up the pats however, the cowpats and the parasites within them accumulate on the pasture during the summer months. This results in two situations occurring:

- 1) Youngstock will be exposed to lower parasite burdens during the dry months, and will therefore develop much less immunity to parasites.
- 2) When the rain does eventually come, there may be a very large number of larvae developing and getting washed out onto the pasture.

The combined effect of this is that a large number of larvae may infect youngstock with relatively low levels of parasite immunity in the late summer and autumn. This could contribute to poor growth rates and potentially diarrhoea in the autumn. If substantial rain is not seen until very late in the grazing season, it can result in large numbers of larvae entering the gut walls and 'hibernating' there until the spring. In this latter situation, youngstock can suffer from life threatening diarrhoea and gut-wall damage when the parasites emerge *en masse* the following spring.

To address this, it is particularly important this year that monthly worm egg counts are taken from at risk youngstock throughout the whole grazing season. This will allow rapid increases in

worm burdens to be picked up early and appropriate treatment administered.

It will also be particularly important to ensure that youngstock receive an appropriate wormer at housing. Ivermectin pour-on products are particularly popular as they are cheap, treat external parasites, and are also active against worm larvae 'hibernating' in the gut wall.

It is not just youngstock that are at risk. Whilst most adult grazing dairy cows are immune to gutworms, every year we see a number of severe lungworm outbreaks in both youngstock and adult cows.

Lungworm is problematic to forecast at the best of times, as the pattern of disease can be quite unpredictable. The potential for mass emergence of lungworm larvae from cowpats this year means that extra vigilance will be required after any rain arrives. Whilst the lungworm vaccine is highly effective, it relies on natural exposure to boost immunity, and therefore a late larval emergence this year could mean that even vaccinated animals that have not been exposed to lungworm during the dry summer are susceptible to disease.

In summary, keep a very close eye out for cattle coughing at grass, and be aware of potentially high gut worm burdens later than you would usually expect in the year! If in any doubt, contact your vet immediately – lungworm can kill quickly.

